

IN THE CLAIMS:

Please amend Claims 1, 2, 10, and 19 as follows.

1. (Currently Amended) A human eye detection method for detecting a human eye by determining whether an unverified candidate eye area is a true eye area based on a neighborhood region of the unverified candidate eye area, comprising the following steps:

- a) inputting an image into an information processing apparatus;
- b) analyzing the image and getting the unverified candidate eye area, in the information processing apparatus;
- c) determining, in the information processing apparatus, the neighborhood region based on the unverified candidate eye area, the neighborhood region being defined as rectangle, the center of which is the center of the unverified candidate eye area and the size of which is calculated from the size of ~~depends on~~ the image;
- d) calculating, in the information processing apparatus, the neighborhood region's size, which is recorded as S;
- e) detecting, in the information processing apparatus, dark areas in the neighborhood region and counting the number of dark areas, which number is recorded as N; and
- f) determining, in the information processing apparatus, whether or not the unverified candidate eye area is a true eye area by comparing the ratio N/S to a predetermined threshold, wherein if the ratio N/S is smaller than said threshold, the unverified candidate eye area is determined to be a true eye area; else, the unverified candidate eye area is determined to be a false eye area.

2. (Currently Amended) The human eye detection method according to claim 1, characterized in that the method further comprises the step of:

determining candidate face areas on the basis of said ~~judged~~ a candidate eye area determined to be a true eye area ~~in~~ obtained from said step f).

3-4. (Canceled)

5. (Previously Presented) The human eye detection method according to claim 1 or 2, characterized in that, step e), executes a binarization processing for detecting the dark areas.

6-7. (Canceled)

8. (Previously Presented) The human eye detection method according to claim 1 or 2, further comprising a threshold calculating step before the step f), for calculating said threshold.

9. (Canceled)

10. (Currently Amended) A human eye detection apparatus for detecting a human eye by determining whether an unverified candidate eye area is a true eye area based on a neighborhood region of the unverified candidate eye area, comprising:

an input unit that inputs an image; and

a processor that (i) analyzes the image to obtain the unverified candidate eye area; (ii) determines the neighborhood region based on the unverified candidate eye area, the neighborhood region being defined as a rectangle, the center of which is the center of the unverified candidate eye area and the size of which ~~depends on~~ is calculated from the size of the image, (iii) calculates the neighborhood region's size S, (iv) detects dark areas in the neighborhood region and determines the total count N of dark areas in the neighborhood region, (v) and determines whether or not the unverified candidate eye area is a true eye area by comparing the ratio N/S to a predetermined threshold, wherein if the ratio N/S is smaller than the threshold, the unverified candidate eye area is determined to be a true eye area, else the unverified candidate eye area is determined to be a false eye area .

11. (Previously Presented) A human eye detection apparatus according to Claim 10, wherein said processor executes a binarization processing to detect the dark areas.

12-18. (Canceled)

19. (Currently Amended) A computer-readable storage medium embodying program codes for causing an apparatus to perform a human eye detection method for detecting a human eye by determining whether an unverified candidate eye area is a true eye area based on a neighborhood region of the unverified candidate eye area, comprising:

inputting an image;

analyzing the image and getting the unverified candidate eye area;

determining the neighborhood region based on the unverified candidate eye area, the neighborhood region being defined as a rectangle, the center of which is the center of the unverified candidate eye area and the size of which ~~depends on~~ is calculated from the size of the image;

calculating the neighborhood region's size, which is recorded as S;

detecting dark areas in the neighborhood region and counting the number of dark areas, which number is recorded as N; and

determining whether or not the unverified candidate eye area is a true eye area by comparing the ratio N/S to a predetermined first threshold, wherein if the ratio N/S is smaller than the threshold, the unverified candidate eye area is determined to be a true eye area, else the unverified candidate eye area is determined to be a false eye area.

20. (Canceled)